

# Force Health Protection Brief



Laos



23 JUL 2010



# FORCE HEALTH PROTECTION

## Laos



**Historical diseases present in area:** Japanese Encephalitis (JE), Malaria (*Plasmodium falciparum*), Tuberculosis (TB), diarrheal diseases, Hepatitis, Dengue Fever, Typhoid, and Avian Influenza H5N1.

**Recent Disease Reports:** Travelers' Diarrhea, JE, Malaria, HIV, Hepatitis B, Dengue Fever, Chikungunya Fever, Shistosomiasis, Leptospirosis, Measles, Typhoid, and Avian Influenza H5N1.

**Force Health Protection Requirements:** Up-to-date immunizations, anti-malarial protocols (except in the city of Vientiane), JE vaccination required for RON personnel, day and night time insect precautions, Pre/Post Deployment PPD if staying more than 1 month, and use approved food and water sources.

**Medical infrastructure:** Hospitals are not equivalent to Western standards. For severe illness or injuries utilize Commander 7th Fleet Annex "Q" requirements for medical treatment.

**Environmental Hazards:** Avoid congested areas due to TB.

**Assessment:** Moderate health risk to operational forces.

23 JUL 2010



# Required Health Measures

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- Immunizations
- Malaria chemoprophylaxis
- Mosquito & insect bite prevention
- Pre-mission health assessment
  - Include pre- and post-visit Tuberculosis (TB) screening test if staying more than one month
- Obtain personal medication



# Required Immunizations



- Start vaccinations early to accommodate vaccines that require several doses within a series
- Mission-specific:
  - Hepatitis B<sup>\*/\*\*</sup>
  - Typhoid
  - Japanese Encephalitis<sup>\*\*</sup>
  - Rabies<sup>\*\*</sup>
- Routine:
  - Tetanus/diphtheria
  - Measles (MMR)
  - Polio
  - Varicella (chicken pox)
  - H1N1 Influenza
  - Seasonal Influenza
  - Hepatitis A

\* Required for health care providers

\*\* For high risk groups only – obtain specific guidance



# FORCE HEALTH PROTECTION



## Laos Entry Requirements

- Although yellow fever is not a disease risk in Laos, the government requires travelers arriving from countries with risk of yellow fever transmission (see guidance for countries in Africa, Central and South America) to present proof of yellow fever vaccination.
- Example of Yellow Fever card.

seu du Service de la Santé Publique des États-Unis, ou le timbre spécial "S-C" approuvé par ce service.)  
Toute correction ou rature sur le certificat ou l'omission d'une quelconque des mentions qu'il comporte peut affecter sa validité.

\*If unsuccessful, vaccination must be repeated and a new certificate executed.  
Si la vaccination n'a pas pris, il faudra recommencer et un nouveau certificat devra être établi.

**INTERNATIONAL CERTIFICATE OF VACCINATION OR REVACCINATION AGAINST YELLOW FEVER**  
**CERTIFICAT INTERNATIONAL DE VACCINATION OU DE REVACCINATION CONTRE LA FIÈVRE JAUNE**

This is to certify that  
Je soussigné(e) certifie que \_\_\_\_\_ sex \_\_\_\_\_  
whose signature follows  
dont la signature suit \_\_\_\_\_ date of birth  
né(e) le \_\_\_\_\_  
has on the date indicated been vaccinated or revaccinated against yellow fever.  
a été vacciné(e) ou revacciné(e) contre la fièvre jaune à la date indiquée.

Date	Signature and professional status of vaccinator Signature et qualité professionnelle du vaccinateur	Origin and batch number of vaccine Origine du vaccin employé et numéro du lot	Official stamp of vaccinating center Cachet officiel du centre de vaccination
1/17/61	Capt. John P. Leddy, MC Walter Reed Army Medical Center, Washington, D.C.	National Drug Co. lot # 4798	
6 June 62	Alvan B. ... MC	National Drug Co. # 5319	

VACCINATING CENTER  
CENTRE DE VACCINATION

ADDRESS (CITY—VILLE) (STATE—ÉTAT)

THIS CERTIFICATE IS VALID only if the vaccine used has been approved by the World Health Organization and if the vaccinating center has been designated by the health administration for the country in which that center is situated.

THE VALIDITY OF THIS CERTIFICATE shall extend for a period of 6 years, beginning 10 days after the date of vaccination (for India, Pakistan, and Ceylon 12 days) or, in the event of a revaccination, within such period of 6 years, from the date of that revaccination.

Any amendment of this certificate, or erasure, or failure to complete any part of it, may render it invalid.

CE CERTIFICAT N'EST VALABLE que si le vaccin employé a été approuvé par l'Organisation Mondiale de la Santé et si le centre de vaccination a été habilité par l'administration sanitaire du territoire dans lequel ce centre est situé.

LA VALIDITÉ DE CE CERTIFICAT couvre une période de six ans commençant dix jours après la date de la vaccination (pour l'Inde, Pakistan et Ceylan 12 jours) ou, dans le cas d'une revaccination au cours de cette période de six ans, le jour de cette revaccination.

Toute correction ou rature sur le certificat ou l'omission d'une quelconque des mentions qu'il comporte peut affecter sa validité.

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# FORCE HEALTH PROTECTION



## POINTS OF CONTACT

- **International SOS/TRICARE Operations Coordinator**
  - Tel: +65-6338-9277 (Singapore)
  - Email: [tricarelon@internationalsos.com](mailto:tricarelon@internationalsos.com)
- **TRICARE Area Office - Pacific**
  - COMM: 011-81-6117-43-2036
  - Email: [james.marron@med.navy.mil](mailto:james.marron@med.navy.mil)
  - Website: [www.tricare.mil/contactus/](http://www.tricare.mil/contactus/)
- **United States Naval Forces Seventh Fleet Surgeon Liaison Officer**
  - COMM: 808-653-2121
  - DSN: 315-453-2121
  - Email: [leticia.macias@c7f.navy.mil](mailto:leticia.macias@c7f.navy.mil)



# FORCE HEALTH PROTECTION



## Food & Water



### Avoid:

Food stands

Fruits & veggies (unless peeled/cooked)

Raw meat or fish

Drinking water other than bottled

Local lakes/ponds





# FORCE HEALTH PROTECTION



## Personal Hygiene

**Frequency: 5 times/day**

**Timing:**

**BEFORE eating**

**BEFORE smoking**

**AFTER bathroom**







# FORCE HEALTH PROTECTION



## Avoiding Insect Bites

- **Cover up**
  - Long sleeves/pants
- **Insect repellent**
  - Permethrin
  - DEET
- **Sleeping**
  - Keep bugs OUT
  - Bed nets, window screens

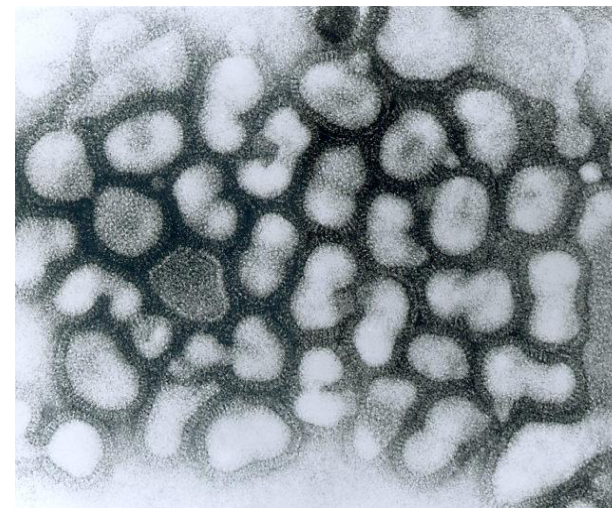


# FORCE HEALTH PROTECTION



## Avian Influenza

- **Causative Agent:** Type "A" strains of influenza (flu) virus.
- **Transmission:** Contact with sick/dead poultry or contaminated surfaces.
- **Common Symptoms:** Fever, cough, sore throat, muscle aches, pneumonia, severe respiratory diseases, and other life-threatening complications.
- **Treatment:** Prescription antivirals (i.e., Tamiflu) should be effective for avian flu.
- **Prevention:** Wash hands before and after handling raw poultry and eggs, and cook poultry to 165 F.





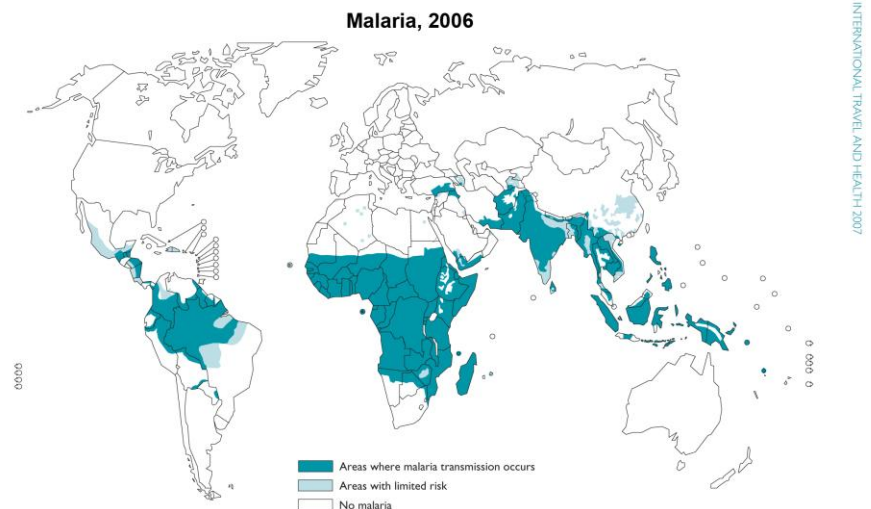
# FORCE HEALTH PROTECTION

## Malaria

- **Agent** – parasite, infects the blood cells.
- **Transmission** - bite of an infected female mosquito.
- **Signs/Symptoms** - Cycles of chills, fever, sweating, vomiting and yellowing (jaundice) of the skin/eyes.
- **Prevention** – Insect skin repellent (DEET), antimalarial medications, permethrin treated bed nets/clothing and use of insecticides.



Malaria mosquito  
(*Anopheles* spp. / 5-7 mm)







# FORCE HEALTH PROTECTION



## Dengue and Dengue Hemorrhagic Fever

- **Causative Agent:** Virus (*Flavivirus*).
- **Transmission:** Bites of *Aedes* mosquitoes which are day biters.
- **Symptoms:** Fever, severe headache, backache, joint pains, nausea, vomiting, eye pain and rash.
- **Treatment:** Symptomatic treatment.
- **Prevention:** No vaccine available. Use insect skin repellent (DEET), permethrin treated bed nets/clothing, and use insecticides.





# Vector-borne Disease: Countermeasures



## INSECT REPELLENTS FOR SKIN AND CLOTHING

### DEET lotion



NSN 6840-01-284-3982



- Apply a thin coat to EXPOSED skin
- One application lasts up to 12 hours

### Permethrin

- Individual Dynamic Absorption Kit (IDA)
- Treatment lasts for over 50 launderings



NSN 6840-01-345-0237



NSN 6840-01-278-1336

- Aerosol spray can
- Treatment lasts through 5-6 washes

## PERSONAL PROTECTIVE MEASURES



**DOD Insect Repellent System**

**YOU NEED TO KNOW...**  
Dry cleaning removes permethrin from the uniform



# FORCE HEALTH PROTECTION



## Travelers' Diarrhea



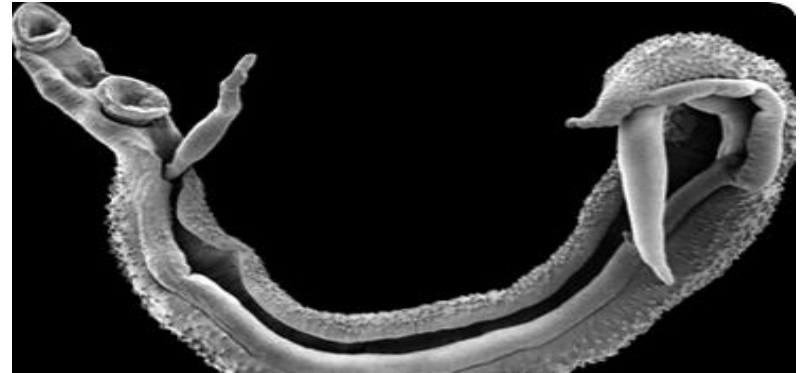
- **Transmission:** Various; tainted food and water, poor sanitation.
- **Signs/Symptoms:** Abdominal cramping/pain, fever, and loose watery stools lasting 3-4 days.
- **Prevention:** Avoid local water, no raw or undercooked food, peel all fruits/veggies, avoid street vendors, and wash hands with soap prior to eating.
- **Treatment:** Antibiotics for bacterial infection (see health care provider) and Imodium AD (Loperamide). Do not take Imodium if you have blood in your stool.



# Force Health Protection

## Schistosomiasis

- **Causative Agent:** Parasitic worms (*Schistosoma spp.*).
- **Transmission:** Skin contact with contaminated freshwater containing snail species that carry the schistosomes.
- **Symptoms:** Within days: rash or itchy skin. Within 1-2 months: chills, fever, cough, and muscle aches. Long-term infection can have serious consequences including organ damage, seizures, and paralysis.
- **Treatment:** Anti-parasitic drugs.
- **Prevention:** No vaccine available. Avoid swimming in freshwater in areas where schistosomiasis occurs. Use safe drinking water practices and clean water for bathing.







# Force Health Protection

## Leptospirosis

- **Causative Agent:** Bacteria (*Leptospira spp.*).
- **Transmission:** Primary: contact with water contaminated with urine from infected animals. Secondary: exposure to contaminated soil via broken skin or contaminated food via mucosal surfaces.
- **Symptoms:** High fever, severe headache, chills, muscle aches, and vomiting. May include jaundice, red eyes, abdominal pain, diarrhea, rash, or show no symptoms.
- **Treatment:** Antibiotics.
- **Prevention:** Don't swim or wade in water that may be contaminated with animal urine, and wear protective clothing and footwear if exposed to contaminated soil or water.





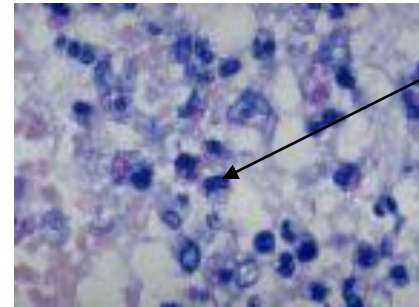


# FORCE HEALTH PROTECTION



## Tuberculosis (TB)

- **Causative Agent:** Bacteria (*Mycobacterium tuberculosis*).
- **Transmission:** Airborne droplet via respiration.
- **Symptoms:** Cough, fatigue, night sweats, fever and rapid heart rate.
- **Treatment:** Antibiotics (some strains resistant to multiple drugs) and respiratory isolation.
- **Prevention:** No vaccine available. Avoid contact with persons with active TB, congested areas, and receive annual screening (PPD).



*M. tuberculosis*





# FORCE HEALTH PROTECTION



## Sexually Transmitted Disease

**HIGH RISK FOR STDs** - Hepatitis B, HIV, etc.

### FHP Requirements

- Avoid sexual contact.
- Use latex condoms if sexually active.
- Use Condom Sense!



**\*STD diseases can be transmitted by tattoo needles.**



# FORCE HEALTH PROTECTION



## Local Animals

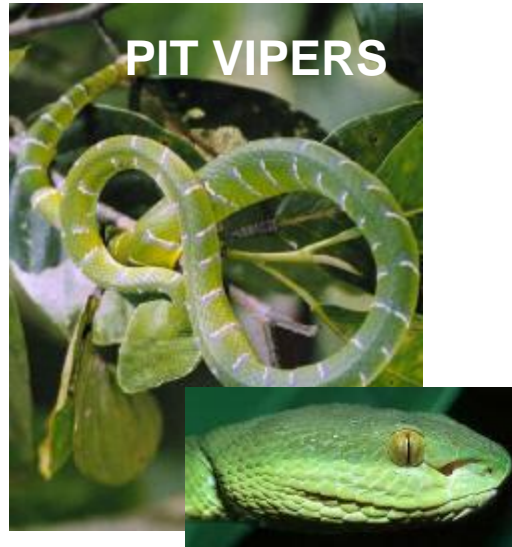
- **Many countries have NO rabies control programs!**
- **Do not feed or attempt to touch animals.**
- **Report bites immediately.**
- **No mascots!**







# VENOMOUS SNAKES



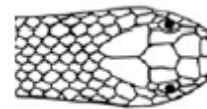
## COBRAS/KRAITS/CORAL SNAKES



Short fangs fixed in erect position in front of mouth.



Round eye pupils.



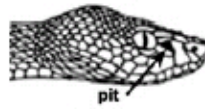
Head small and not distinct from the body.



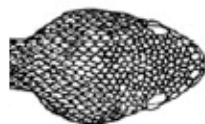
## PIT VIPERS



Long, hinged fangs that tuck into roof of mouth when not in use.



Vertically elliptical eye pupils; pit vipers with heat sensing organ between eye and nostril.



Broad triangular head very distinct from narrow neck.







# HAZARDOUS PLANTS



- Plant resins cause skin irritation
- Poisonous roots, stems, leaves, and fruit
- Weeds and stinging nettles
- Thorny shrubs and trees

## Poisonous Plants



Systemic Poison



*Elephant's Ear Plant*



*Mucuna pruriatrum*



Irritation



*Rattan Palm*

## Thorny Plant

Punctures and Abrasions

## COUNTERMEASURES

- Avoid touching unfamiliar plants
- Use clothing as protective barrier
- Rinse skin promptly after exposure
- Wash clothing after contact
- Never eat any part of unfamiliar plant



# Questions?



- **Please contact your local health care provider**
- **Navy Environmental and Preventive Medicine Unit No. 6**  
**Duty Phone: 808-471-0237**  
**nepmu6admin@med.navy.mil**
- **Navy Environmental and Preventive Medicine Unit No. 5**  
**Duty Phone: 619-556-7070**  
**nepmu5@med.navy.mil**